



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section

Master

Date

Thursday

18 / 03 / 2021

Course Code

(PMG506)

Advanced project Management

Instructions:

- اخر موعد للتسليم هو يوم الخميس 2021-05-08 في تمام الساعة 9 مساءً.
- الإجابة متاحة باللغة الإنجليزية أو اللغة العربية مع مراعاة أن تكون المصطلحات العلمية باللغة الانجليزية.
- يتم تسليم المشروع في صيغة ملف . pdf مع الالتزام نموذج الجامعة ولن تقبل أي مستندات أخرى.
- يجب مراعاة أقسام البحث الرئيسية (مقدمة Introduction، دراسات علمية سابقة Literature Review، طريقة البحث Methodology، النتائج والمناقشة Results and Discussion، وأخيراً المراجع References. وان كان هناك ملحقات Appendices يتم إضافتها)
- يجب الالتزام بـ Theme موحّد كما يلي:
- حجم الخط 12.
- نوع الخط Arial.
- لون الخط أسود.
- المسافة بين الأسطر 1.5 line spacing
- عدد صفحات البحث (لا يقل عن ثلاث صفحات ولا يزيد عن ست صفحات).

Instructor's Name: Eng. Dr. Akram M. S. Ali

Project:

You are required to document your role in administering a project. The project may be set in a business, social, sporting, or family environment but must be of a significant size and scale. If you do not have an actual project to write about you may complete the project hypothetically.

This report will be between three to six pages in length. This is a significant research project.

Your report must address ~~each~~ **ONE** of the following issues:

1. Identify and describe the purpose, scope, and objectives of the project. **Display this information using an appropriate tool.**
2. Describe how the team is given an outline of the project.
3. Describe the strategies that are going to be set up to maintain communication with the team members.
4. Describe the tools that are going to be used to monitor the goals, time frames or milestones.
5. Identify project milestones and activities. **Display this information using an appropriate tool.**
6. Create a budget and link the costs to the key milestones for a project.
7. Describe how you are going to divide tasks and resources amongst a project team. **Display this information using an appropriate tool.**
8. Briefly describe how the progress will be monitored.
9. How are current project records maintained? Who has responsibility for this? provide some recommendations on how this process could be improved.
10. Describe the current procedure for finalizing projects. Create your own procedure and identify how you will evaluate the success of the project.
11. Legislation that may affect the project including health and safety, and anti-discrimination legislation.

Best of luck...

المشروع:

مطلوب منك توثيق دورك في إدارة مشروع. قد يتم تعيين المشروع في بيئة تجارية أو اجتماعية أو رياضية أو عائلية ولكن يجب أن يكون بحجم مناسب. إذا لم يكن لديك مشروع فعلي لتكتب عنه ، فيمكنك إكمال المشروع افتراضياً. **ستكون هذا التقرير من ثلاث إلى ست صفحات.**

يجب أن يعالج تقريرك ~~كل~~ **احد** القضايا التالية:

1. تحديد ووصف الغرض والنطاق والأهداف من المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
2. صف كيف يتم إعطاء الفريق مخططاً تفصيلياً للمشروع.
3. وصف الاستراتيجيات التي سيتم وضعها للحفاظ على التواصل مع أعضاء الفريق.
4. صف الأدوات التي سيتم استخدامها لرصد الأهداف أو الأطر الزمنية أو المعالم.
5. تحديد معالم المشروع والأنشطة. اعرض هذه المعلومات باستخدام أداة مناسبة.

6. إنشاء موازنة وربط التكاليف بالمعالم الرئيسية للمشروع.
7. صف كيف ستقوم بتقسيم المهام والموارد بين فريق المشروع. اعرض هذه المعلومات باستخدام أداة مناسبة.
8. صف بإيجاز كيف سيتم رصد التقدم.
9. كيف يتم الاحتفاظ بسجلات المشروع الحالية؟ من المسؤول عن هذا؟ تقديم بعض التوصيات حول كيفية تحسين هذه العملية.
10. وصف الإجراء الحالي لإنهاء المشاريع. قم بإنشاء الإجراء الخاص بك وحدد كيفية تقييم نجاح المشروع.
11. التشريعات التي قد تؤثر على المشروع بما في ذلك الصحة والسلامة ، وتشريعات مكافحة التمييز.

مع تمنياتي بالتوفيق..

**Al-Sadafa Roundabout Develop and
Rehabilitation Project
Advanced Project Management
(PMG506)**

**Name. Ali Mohamed Yusuf
ID No. 2021200623**

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Abstract

The basic concept of a Project Scope Management is defining and controlling what is included and what is not included in the project and ensure that all and only the work required finishing the project is completed.

It is vital for a project manager to have a scope, it defines the step the needs to be taken in ordered to achieve the project goals. It includes, but is not limited to, what the end goal is, how much the whole project and every segment of it will cost, how much work it will take and when the project is supposed to be finished.

The following processes are the main pillars of the Project Scope Management and whole chapters will be dedicated to each process in the following article. These processes are: Plan Scope Management, Collect Requirements, Define Scope, Create Work Breakdown Structure, Validate Scope and Control Scope. The processes all connect in some way. It is also important to mention that in the project framework, it is possible to define the scope in two different ways, one way is to refer to the scope as product scope and the other ways is called project scope.

The product scope refers to how a product is made while a project scope would focus more on how to deliver the service or product. A product scope could therefore be included in the project scope.

The Scope Baseline is considered as a sacred plan and is not to be changed unless it follows formal change control procedures. It is therefore important for a project manager to have a scope and manage it properly.

1- Introduction:

- 1.1. This paper reviews the scope of the project and what are the procedures followed to achieve the desired goal. My role in this research will be to present a clear methodology for the elements of defining the scope of the project as (project manager) whereas; the project is (Al-Sadafa Roundabout Develop and Rehabilitation) in Dammam city , on AL Khaleg Road.
- 1.2. The current stage of the project is the completion of the construction works, and the architectural works, mechanical and electrical works ongoing.
- 1.3. Project Scope Management is a very important function which can impact the level of the project management success and it is considered one of the most important function that's need to be accomplished by project manager, Accordingly, a failure or uncertainty in project scope management process is directly reflects in the cost, time and quality of the project, the magnitude of the impact can vary from one project to another, however, it's could be very significant in mega projects. Many scholars in project management field for many years have focused in studying project success factors; However, the area of scope management still requires further exploration and investigations. Therefore, almost all project methodologies consider the scope management a fundamental element or tool.
 - Project scope management process contains the procedures which confirm that project will be completed as planed and intended if it is only comprises the required work. Moreover, defining and controlling the main components of project scope by illustrating what and is not going to be part of scope is a major sector of scope management process; It is like a one package used to fulfill the main purpose of the project. So, it is a comprehensive formulation of a continuous and systematic approach to be used during the execution phase of a project to complete the project objectives and accomplish the driving business need, Theses process are divided to six main steps which are; conceptual development, the scope statement, work authorization, scope reporting, control system Process and project closeout.
- 1.4. Defines scope management as the processes required to guarantee the inclusion of all work required in order to complete the project successfully. However, project management researchers and academic literature employ a different view on project scope management, arguing that the primary concerns of scope management are the defining and controlling of what is included and excluded in the particular project ([APM, 2006, p. 34](#); [Larson & Larson, 2009, p. 5](#); [Mustafa, 2014, p. 13](#); [Wysocki, 2011, p. 11](#)). [Kerzner \(2017, p. 361\)](#) expands the definition in more general terms as work that must be completed to finish the project. Put in even simpler terms by [Wysocki \(2011, p. 104\)](#), scope management must answer

two questions: “What will you do?” and “How will you know you did it?” anchoring scope management with monitor and control.

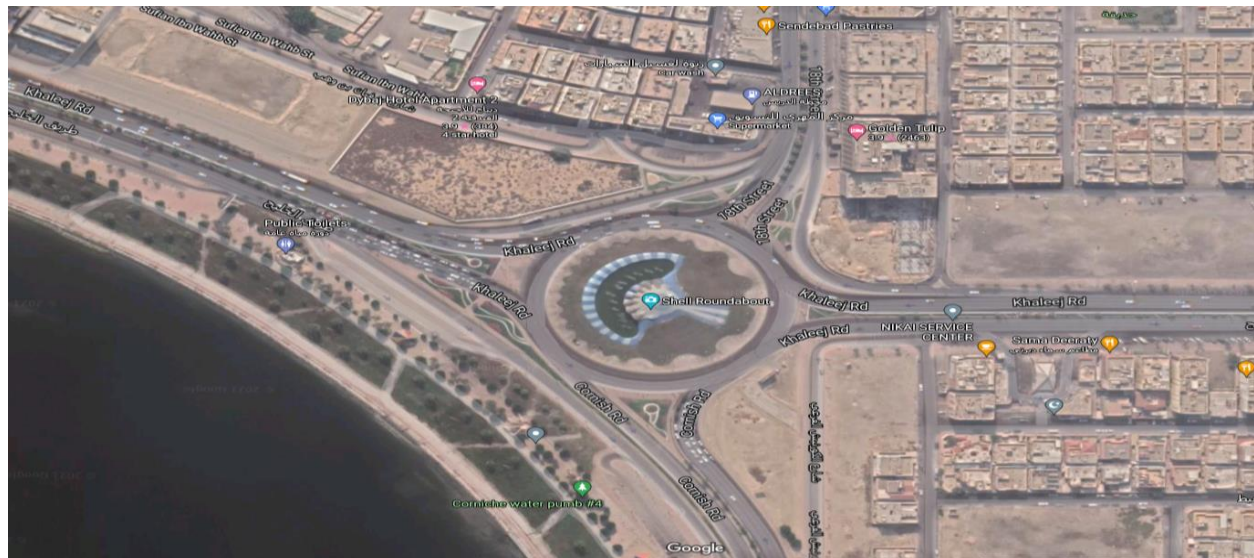
- 1.5. Previously, the project scope used to be perceived by project managers as a rigid and static target. The project scope is, instead, an evolving and naturally fluctuating target which lays the assumption that scope change is an inevitable occurrence ([Davis & Radford, 2014, p. 34](#); [Millhollan, 2008](#)).
- 1.6. This study underlines the importance of implementing a proper scope, concluding that the most frequent factor affecting project success is a poorly defined scope, adds to this finding, stating that 50 percent of planning problems relate to an unclear formulation of the project scope and goals. If scope management does not take place, it might lead to unclear change processes, resulting in scope creep ([Larson & Larson, 2009, p. 6](#)) the project scope statement is a document created as a result of the project scope requirements.

2. Methodology

1.1 Project Information

Project name	Al-Sadafa Roundabout Develop and Rehabilitation
Owner	Eastern Region Municipality
Designer	College of Architecture and Planning
Contractor	NA
Consultant	NA
Project Budget	The cost of the project is (1,000,000 SAR)
Project Area	3300 Sq. M
Duration of the project	(when started & when will finish): Jun. 2021 to Aug. 2021

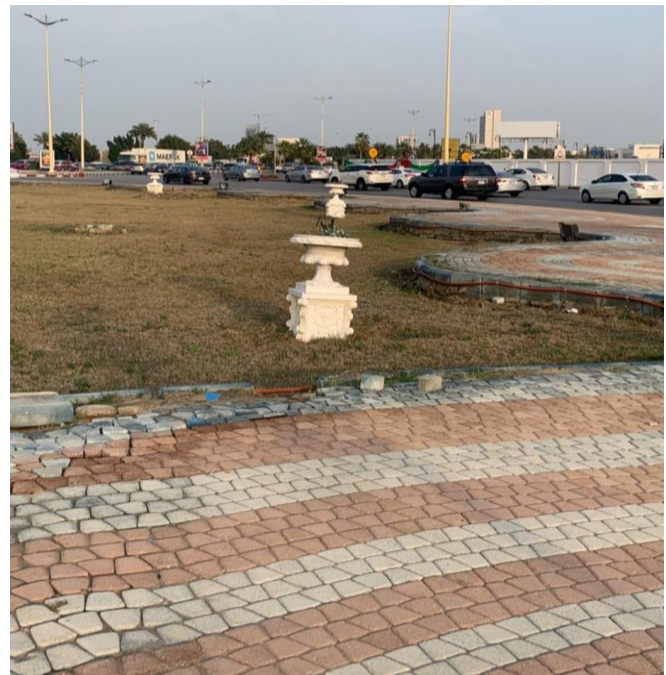
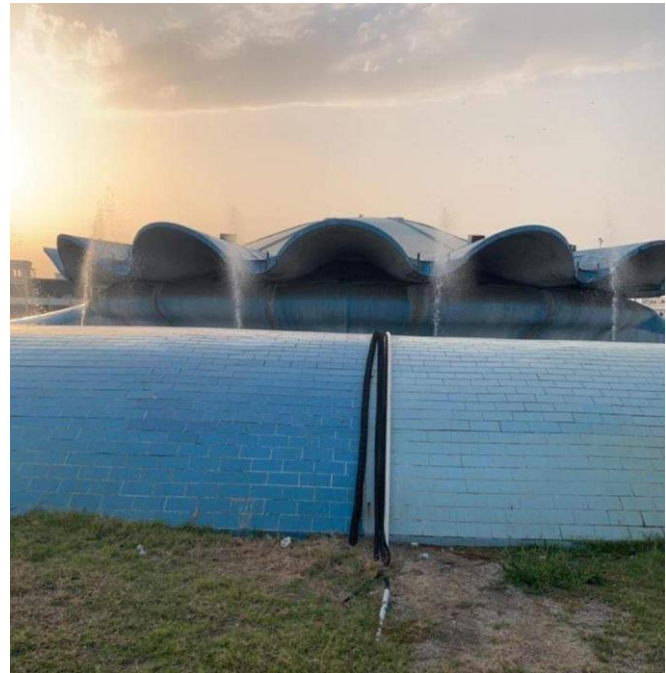
1.2 Project Location:



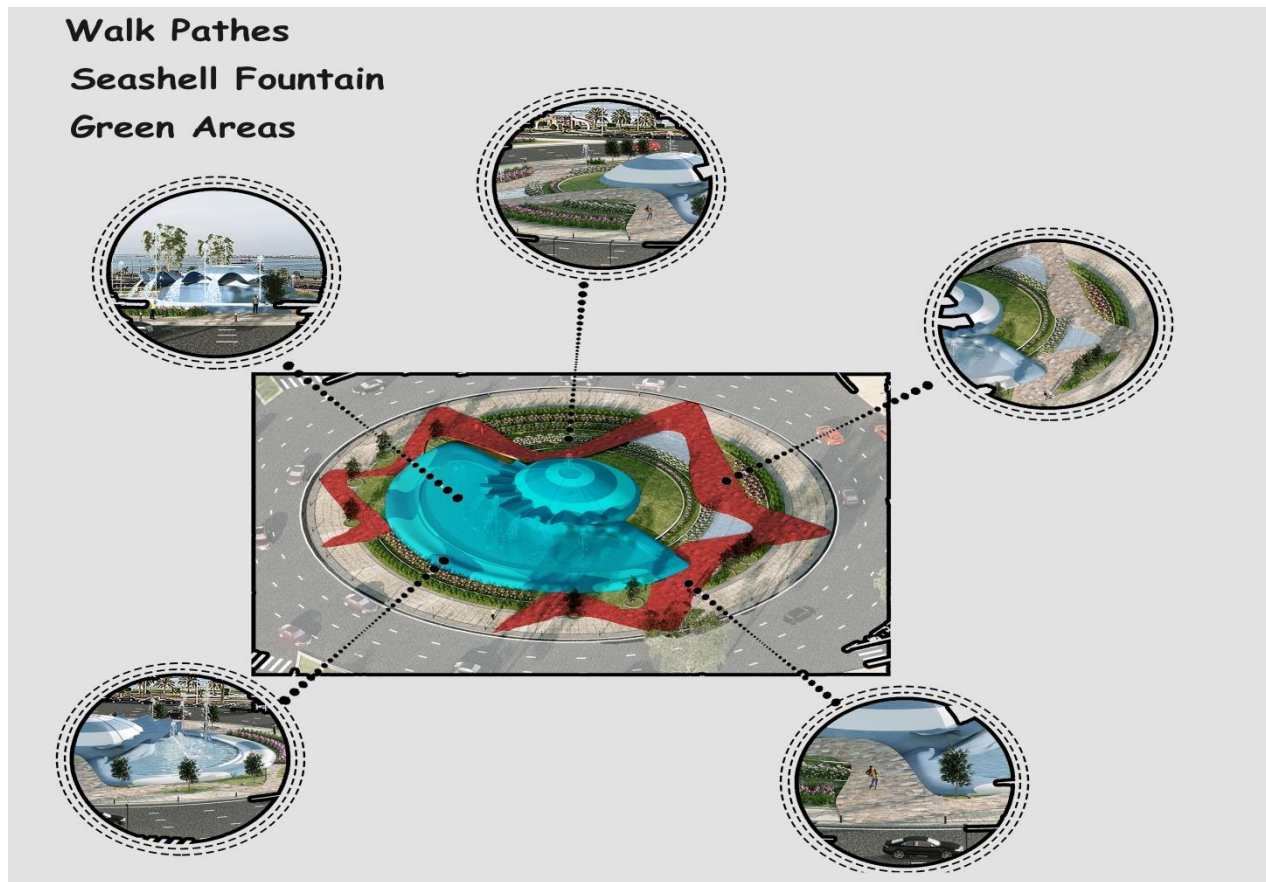
LOCATION MAP

- Dammam City , on Al- Kaleej Road

Site Existing Conditions:



Project Elements:

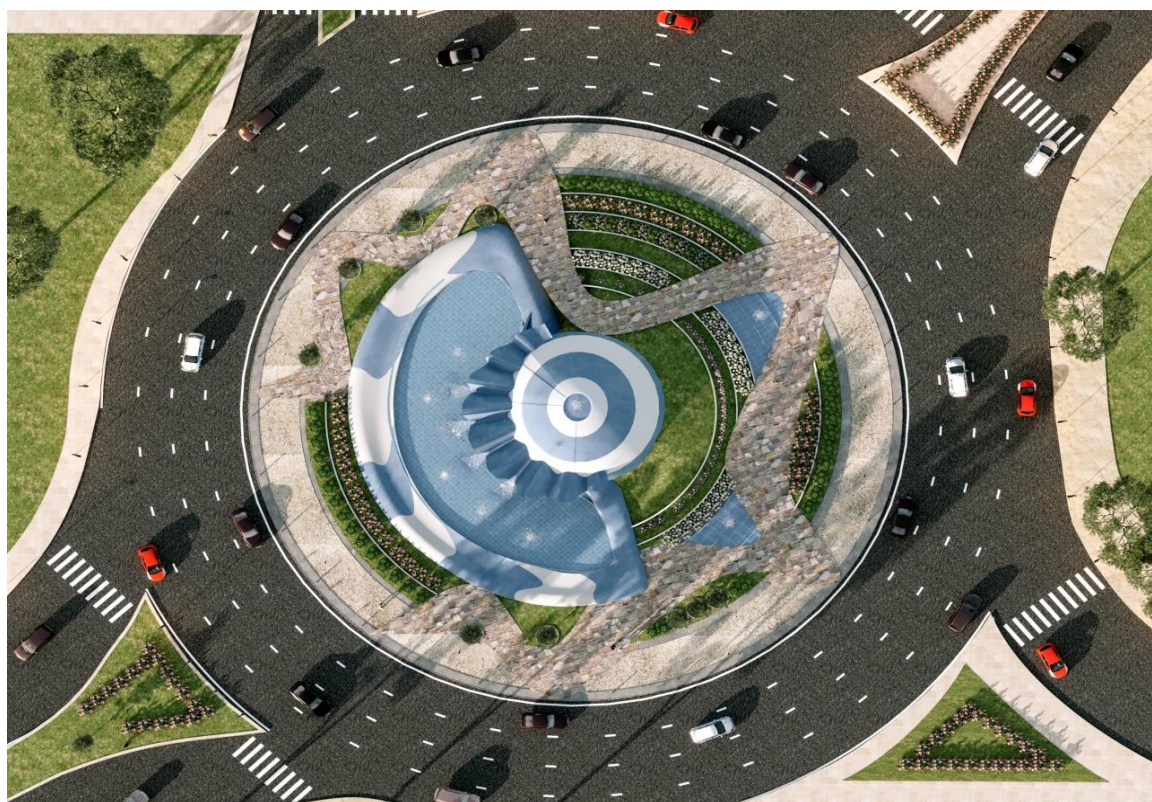


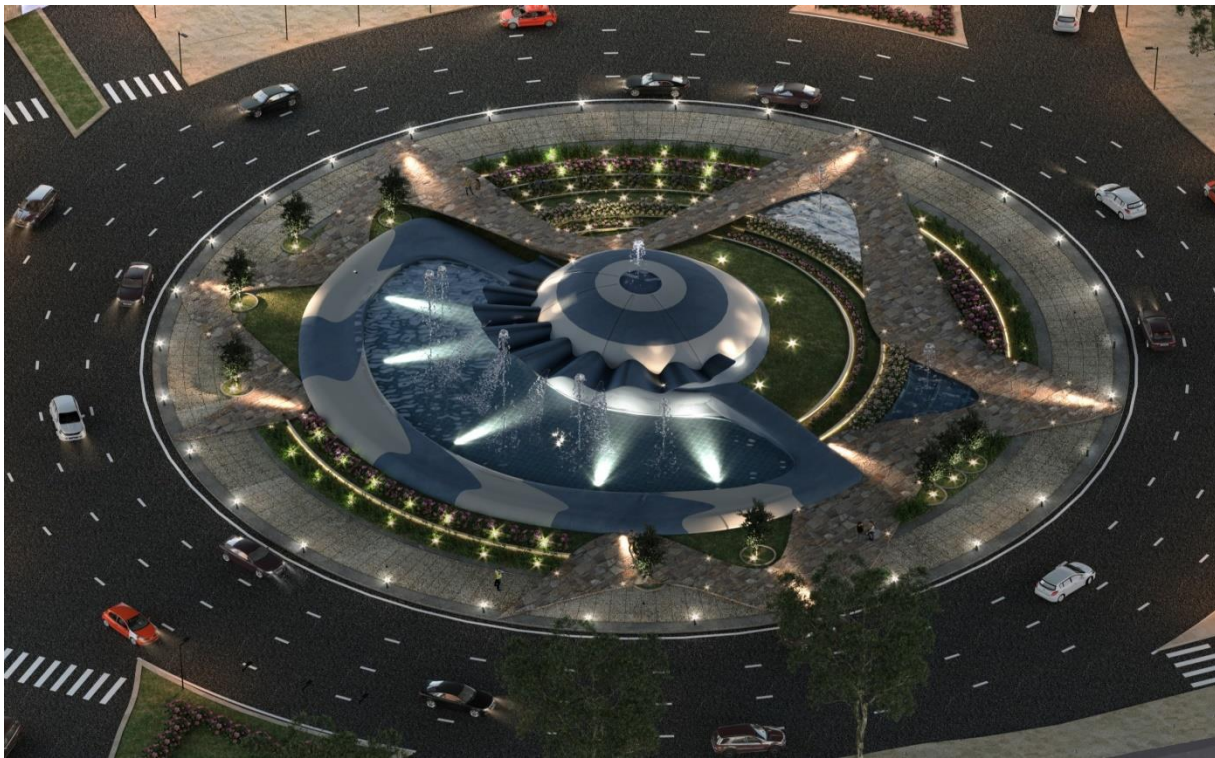
The project is a re-design of main elements to preserve its main landmark and consists of:-

- Walk Paths & curbstones
- Seashell fountain
- Green areas / Landscape.
- Shaded Playground.
- Electrical lights.
- Mechanical components (Pumps,...etc.)

Activity	Activity Name
DRSR.C CONSTRUCTION	
DRSR.C.P SITE PREPARATION	
1	Site Cleaning & Traffic Detour
2	Demolition of existing landscape
DRSR.C.C CONCRETE REPAIR	
3	Clean the surface of Old Concrete
4	Rebar protection & Concrete Grouting
DRSR.C.S SANITARY WORKS	
5	Removal of Old Pipes & Fittings
6	Install New Pipes & Fittings
7	Install Pumping System
DRSR.C.F FINISHING WORKS	
8	Plastering Works
9	Painting Works
DRSR.C.E ELECTRICAL WORKS	
10	Install Main Panel Board
11	Install Cables & Wires
12	Install Lighting Poles
13	Install Lighting Fixtures
DRSR.C.L LANDSCAPE	
14	Install Interlock & Curb Stones
15	Install Grass & Sherbs

Design Perspectives

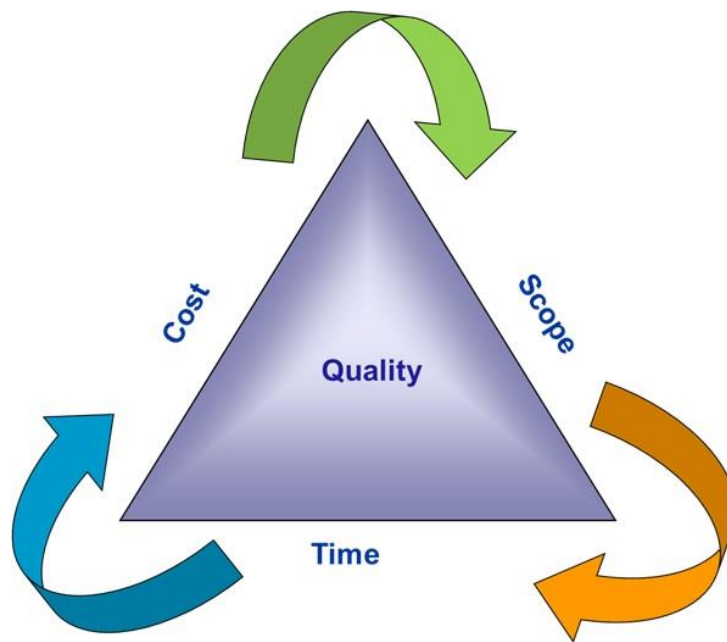




2-1 Project Scope Management:



These processes required to ensure that the project includes all the work required to complete the project successfully

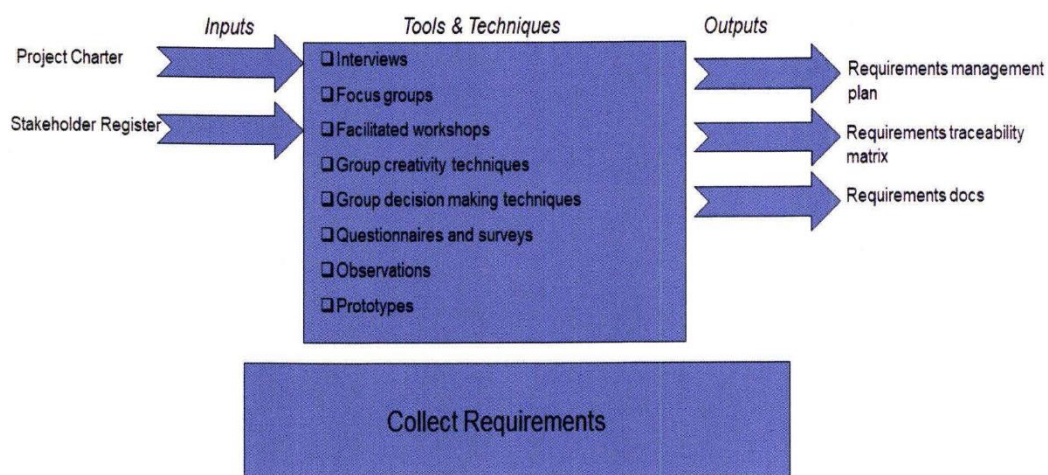


Can't manage schedule and budget if scope is out of control (Triple Constraint)

Five processes Manage Scope:



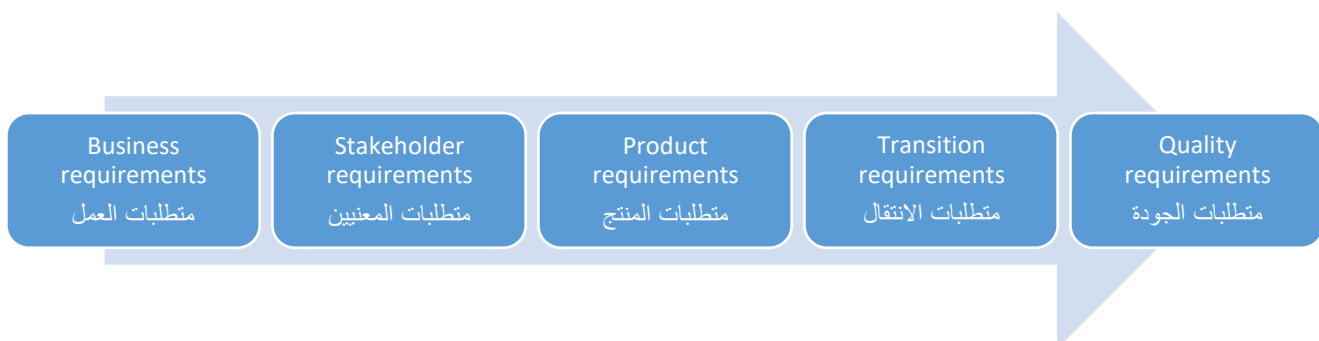
Collect Requirements



Collect Requirements is the process of defining and documenting stakeholders' needs and managing customer expectations to meet the project objectives.

Requirements become the foundation of the WBS.

Cost, schedule, and quality planning are all built upon these requirements.



Input:

Project Charter

A statement of objective s in a project. This statement also sets out detailed project goal s, and the level of authority of a project manager.

PROJECT CHARTER

Project Name: Al-Sadafa Roundabout Develop and Rehabilitation Project.
Date: 1-4-2021

1. PROJECT GOALS		
The aim of the project is to develop and rehabilitate the AL- Sadafa roundabout (traffic circle) in the Corniche of Dammam through redesigning and planning as it is Landmark to preserve urban identity and to achieve flexibility in vehicle traffic without causing traffic congestion.		
2. DELJVERABLES		
Provide engineering and technical staff and expert labors. Provide equipment and tools for excavation and construction works Materials and resources needed Get approval for drawings, technical details and materials		
3. SCOPE DEFINITION		
Architectural design for the AL- SADAFa roundabout will be presented in the city of Dammam to be developed and rehabilitated with the surrounding area, and some of the current components of the roundabout will be modified “landscape & the colors of the seashell will be changed, and the lighting will be redesign to give a wonderful appearance to serve a community for residents and visitors to the city		
4. PROJECT MILESTONES		
1.	Start Site Preparation and Early Works	1-May-21
2.	Complete Re- Design of Roundabout	15-May-21
3.	Completion of Site Mobilization Works	22-May-21
4.	Completion Concrete Repair Works	15-Jun-21
5.	Complete Sanitary Works	26-Jun-21
6.	Finishing Work Completion	05-July-21
7.	Project Completion Date	30-July -21
5. ASSUMPTIONS , CONSTRAINTS & DEPENDENCIES		
- The execution of the project as bid from May 2021 to July 2021 - The execution of the project according to the budget 1,000,000 SAR		

- Compliance with Eastern Region Municipality specifications
- Budget – estimated cost of the project ,Project costs will stay the same as initially budgeted costs
- Scope – the scope of the what you're going to deliver ,The project scope will not change once the stakeholders sign off on the scope statement
- Schedule: tasks, durations , and dependencies needed to complete the project Materials will arrive as planned within the project schedule
- Vendor contracts will be fully executed within 3 months of vendor selection.

6. PROJECT ORGANIZATIONAL STRUCTURE

identify the key stakeholders and team members by function, name and role

Function	Name	Role
Project Manager	_____	_____
Construction Manager	_____	_____
Representative of the Ministry of Education	_____	_____

7. PROJECT AUTHORIZATION

Approved by:	Business Manager	Date
Approved by:	Project Manager	Date

1.3 Project Charter

1.3.1 Project Goals:

- Al-Sadafa Roundabout Develop and Rehabilitation was built over 10 years ago.
- The existing Roundabout is old and there is a need to develop & Rehabilitation for all components.

1.3.2 Deliverables:

- New designs with full requirements and systems according to the drawings and specifications.
- The engineering reports & reviews.
- As built drawings.
- Full project documents and guarantees

1.3.3 Scope Definition:

- The scope of work of this project consists of developing and rehabilitating the seashell roundabout that will be built, and the land area is 3300 square meters within the boundaries of the current site.

1.1.1 Project Milestones:

Project Key Dates	
Project Start Date	1 st -MAY-2021
Re- Design of Roundabout	16 st -MAY-2021
Site Mobilization	22 st -MAY-2021
Concrete Repair	15 st -JUNE-2021
Sanitary Work	26 st -JUNE-2021
Finishing Work	05 ST -JULY-2021
Project Completion Date	30 ST -JULY-2021
Total Project Duration	3 MONTHS

1.1.2 Assumptions, Constraints:

A. Assumptions:

- Resource-level assumptions play heavily into the success or failure of a project because project management is based on available and allocated resources, it can Delay schedule, and ultimately the entire scope and goal.

- Time-based assumptions are impacted by resource availability, technology, quality factors, and financial limitations.
- Quality-specific assumptions are required to adhere to specifications in order to meet client requirements.
- Financial assumptions are the most important factor of the project to make the project moving.

B. Constraints:

- Project Period as contract from May 2021 to July 2021.
- The budget of the project according to the bid 1,000,000 SAR, Project costs will stay the same as initially budgeted cost.
- Technical constraints: the project must compliance with Eastern Region Municipality specifications.
- The materials must be from the approval venders from Eastern Region Municipality, Also the laboratories, equipment and all subcontractors.

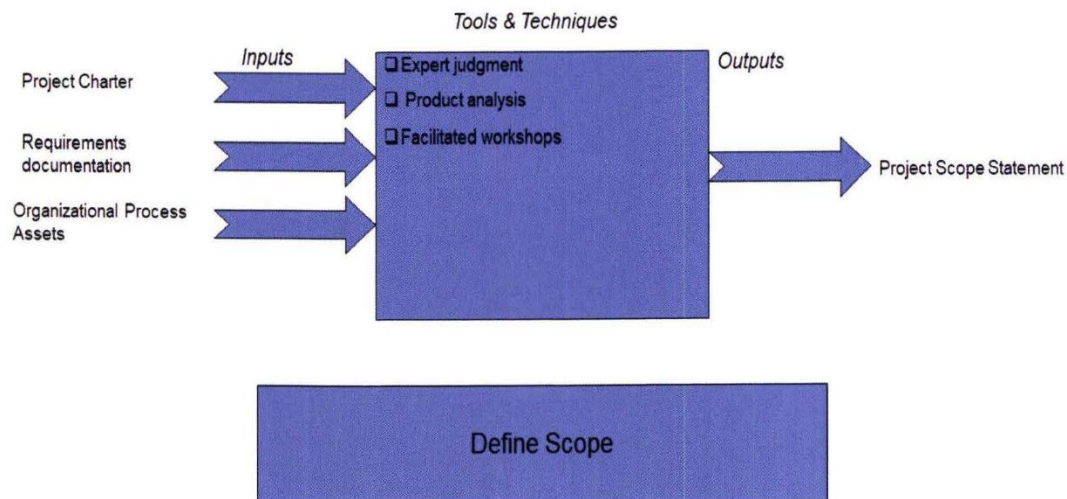
C. Stakeholder Register:



Stakeholder Name	Stakeholder Group	Role/Title	influence	Location
Stakeholder 1	Construction	Construction PM	med	External
Stakeholder 2	Design team	Mechanical Engineer	high	External
Stakeholder 3	Design team	Electrical Engineer	high	External
Stakeholder 4	Design team	Architect	high	External
Stakeholder 5	Eastern Region	Client	high	External
Stakeholder 10	Eastern Region	Client	high	External
Stakeholder 11	Facility	Director	med	External
Stakeholder 12	Facility Planning	Administration	med	External
Stakeholder 13	Facility Planning	owner PM	high	External
Stakeholder 14	Facility Planning	ADA. Reviewer	med	External
Stakeholder 15	Facility Services	Waste/Recycling	low	External
Stakeholder 16	Facility Services	Administration	med	External
Stakeholder 17	Facility Services	Safety Control	med	External

1.2 Define Scope

Define Scope is the process of developing a detailed description of the project and product. The key benefit of this process is that it describes the product, by defining which of the requirements collected will be included in and excluded from the project scope.



Outputs

Project Scope Statement

Define Scope is the process of developing a detailed description of the project and product. The key benefit of this process is that it describes the product, service, or result boundaries by defining which of the requirements collected will be included in and excluded from the project scope.

Is tool used to describe the major deliverables of a project including the key milestones, high level requirements, assumptions, and constraints. The project scope statement is a useful tool for future decision making when new change requests are considered to modify the project scope.

- Product scope description
- Product acceptance criteria
- Project deliverables
- Project exclusions
- Project constraints
- Project assumptions

Project Scope Statement

Project Overview:

Eastern Region Municipality has a many initiatives to serve the community. Architectural design for the AL- SADAFa roundabout will be presented in the city of Dammam to be developed and rehabilitated with the surrounding area, and some of the current components of the roundabout will be modified “landscape & the colors of the seashell will be changed, and the lighting will be redesign to give a wonderful appearance to serve a community for residents and visitors to the city
The existing building is old and there is a need to build a new building next to the old, then will Demolish it after transfer students to new building.

Product Description:

AL- SADAFa roundabout facilities which are to be built in the land designated as lot area of 3,300 square meters within the boundary of existing roundabout.
The roundabout consists of a main water fountain, secondary water fountains, green areas, landscape ,pedestrian walkways, sidewalks, lighting works and water pumps

Completion Criteria

1	SUBSTRUCTUR E WORKS
2	SUPERSTRUCTURE WORKS
3	FINISHES WORKS
4	MECHANICAL WORKS
5	ELECTR ICAL WORKS
6	Landscape WORKS
10	MISCELLANEOUS
11	SPECIAL TIES WORKS
12	FURNISHINGS

Success Criteria

1	Completed on budget 1,000,000 SAR
2	Completed on schedule on July 2021
3	Zero accidents
4	Project handling as specified

Project Scope Statement

Assumption		
No.	Assumptions:	Impact if False:
A1	End users will be .available to test during the time they agree	We require a third party to receive
A2	Project costs will stay the same as initially budgeted costs	
A3	The project scope will not change once the stakeholders sign off on the scope statement	We will reject the amendment if there extra cost
A4	Materials will arrive as planned within the project schedule	Fast tracking to reduce project duration

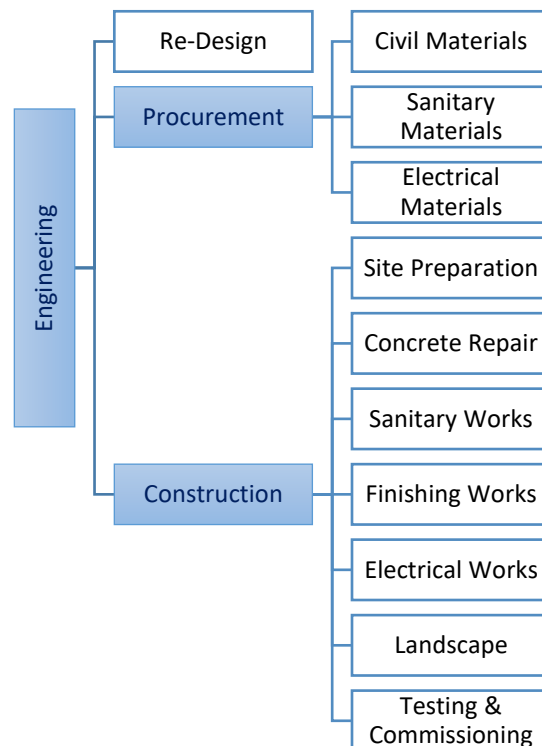
Project Milestone	
Project Start Date	1st-MAY-2021
Re- Design of Roundabout	16st-MAY-2021
Site Mobilization	22st-MAY-2021
Concrete Repair	15st-JUNE-2021
Sanitary Work	26st-JUNE-2021
Finishing Work	05ST-JULY-2021
Project Completion Date	30ST-JULY-2021
Total Project Duration	3 MONTHS

1.3 WBS Dictionary

A document that provides detailed information about each element in the WBS, including work packages.

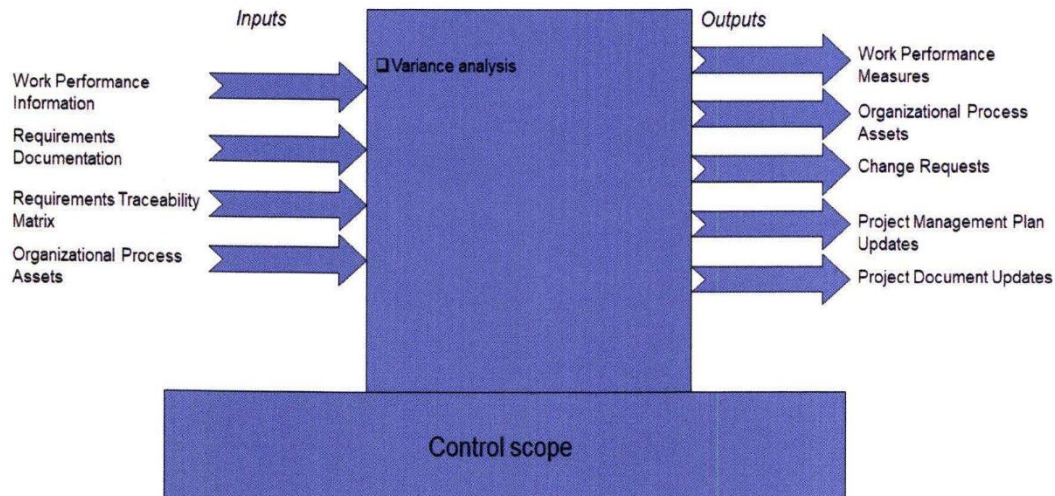
WBS Number: 1.2.0001	WBS Name: Pouring of Concrete for Footing	Work Package? ☒ Yes ☐ No
WBS Predecessor(s): Installation of Formworks for Footing	WBS Description: Pouring of Concrete for Footing for main building	
Must Start Date: 8-Sep-19		
Must Finish Date: 22-Sep-19		
WBS Estimated Effort: 14 days	Assumptions and Constraints: Get approval for concrete batch plant	
Assigned to: Show the role or the person	Availability of laboratory material technician	

Work Breakdown Structure



1.4 Control Scope

Control Scope is the process of monitoring the status of the project and product scope and managing changes to the scope baseline.



Work Performance Measures

Comparison between work performance information and current status of with planned and come up with work performance measurements to ensure that the project includes all the work required to complete the project successfully

2. COMMUNICATION MANAGEMENT

COMMUNICATIONS MANAGEMENT PLAN

This Communications Management Plan:

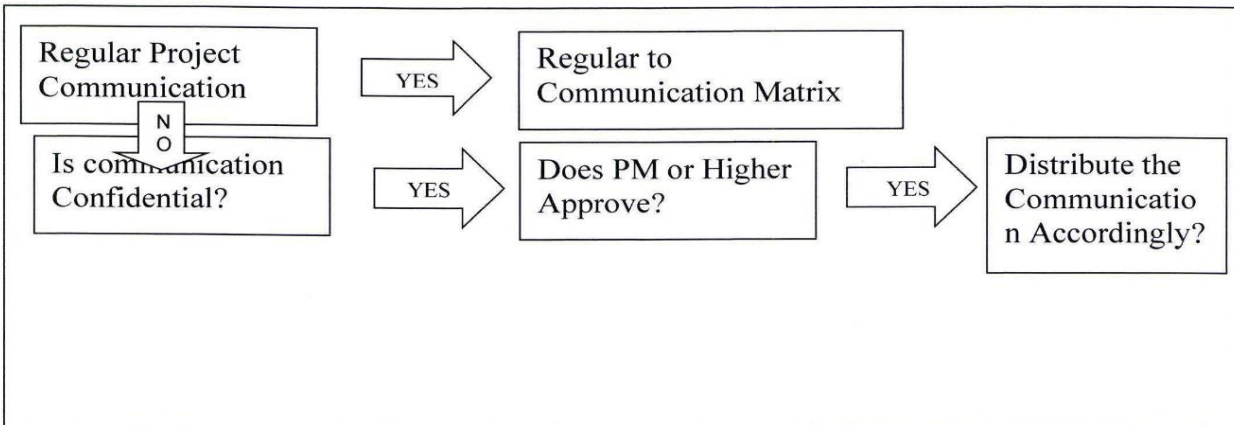
- Sets the communications framework for this project.
- As part of identifying all project stakeholders, the project manager will communicate with each stakeholder in order to determine their preferred frequency and method of communication. This feedback will be maintained by the project manager in the project's Stakeholder Register. Standard project communications will occur in accordance with the Communication Matrix; however, depending on the identified stakeholder communication requirements, individual communication is acceptable and within the constraints outlined for this project.
- In addition to identifying communication preferences, stakeholder communication requirements must identify the project's communication channels and ensure that stakeholders have access to these channels. If project information is communicated via secure means or through internal company resources, all stakeholders, internal and external, must have the necessary access to receive project communications.

Communication Methods and Technologies

- The project team will determine the communication methods and technologies based on several factors to include: stakeholder communication requirements, available technologies (internal and external), and organizational policies and standards.
- Access to the platform will be controlled with a username and password. The project manager is responsible for ensuring all project communications and documentation are copied to the project platform.

Communication Flowchart

The communication flowchart below was created to aid in project communication. This flowchart provides a framework for the project team to follow for this project. However, there may be occasions or situations which fall outside of the communication flowchart where additional clarification is necessary. In these situations, the Project Manager is responsible for discussing the communication with the Project Sponsor and making a determination on how to proceed.



COMMUNICATION STANDARDS

For this project, Contractor and Consultant will utilize standard organizational formats and templates for all formal project communications. Formal project communications are detailed in the project 's communication matrix and include:

- Kick-off Meeting - project team utilized a template for meeting agenda and meeting minutes.

Additionally, slides presented will using the Contractor standard slideshow template.

- Project Team Meetings - project team will utilize an agreed standard templates for meeting agenda and meeting minutes. Additionally, any slides presented will use the Contractor standard slideshow template.
- Monthly Project Status Meetings - project team will utilize standard templates for meeting agenda and meeting minutes. Additionally, any slides presented will use the ARCON standard slideshow template.

Project Status Reports - project team will be utilized Contractor standard templates for meeting agenda and meeting minutes.

- Informal project communications should be professional and effective but there is no standard template or format that must be used.

Communication Escalation Process

Efficient and timely communication is the key to successful project completion. As such, it is imperative that any disputes, conflicts, or discrepancies regarding project communications are

resolved in a way that is conducive to maintaining the project schedule, ensuring the correct communications are distributed, and preventing any ongoing difficulties. In order to ensure projects stay on schedule and issues are resolved, Contractor will use its standard escalation model to provide a framework for escalating communication issues. The table below defines the priority levels, decision authorities, and timeframes for resolution.

3. Conclusions& Recommendation:-

- Clear communication between the project team and stakeholders is the key of an effective Project Scope Management. Both parties understand and agree on the project scope and how the project goals will be achieved.
- The project scope helps with the understanding of the requirements on what should be done.
- If a project does not have a project scope, there is no effective way of estimating the time or the cost of that project.
- If there must be any changes made on the project, it could upset the project schedule and affect the cost of the project. It is not hard to implement the Project Scope Management; therefore it could pay off to have a clear scope and a well-structured project resulting in a project with minimal overrun.

References

1. (APM, 2006, p. 34; Larson & Larson, 2009, p. 5; Mustafa, 2014, p. 13; Wysocki, 2011, p. 11). Kerzner (2017, p. 361).
2. Wysocki (2011, p. 104).
3. (Davis & Radford, 2014, p. 34; Millhollan, 2008).
4. (Larson & Larson, 2009, p. 6)